Title (en)

PROCESS AND INSTALLATION DRYING SEWAGE SLUDGE

Publication

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Application

EP 90100899 A 19900117

Priority

DE 3915082 A 19890509

Abstract (en)

[origin: EP0396852A1] Sewage sludge passes through a viscous plastic phase between about 50 and 60 % dry matter content during drying. As at this consistency drying in a contact drier is not possible, mechanically dewatered sewage sludge has been first brought to a dry matter content of about 65 % by admixture with finished material, and the resulting mixed product fed to the contact drier. A very large amount of material is returned, causing a significant expense for marginal installations. With convective drying, e.g. in a belt drier, such back-mixing may be avoided, as the sticky consistency of the sludge has a less interfering effect here. Convective drying however has a high heat requirement and requires great expenditure for waste gas purification. According to the invention, mechanical dewatering of the sewage sludge is followed by a predrying in the contact drier. This is stopped before the product reaches the viscous plastic phase. In a process in which the final drying is likewise carried out in a contact drier, the predried intermediate is brought to a dry matter content of approximately 65 % by admixture of a relatively small quantity of final product. The viscous plastic region is thus passed over, and the final drying in the contact drier is possible without difficulty. In another process according to the invention in which the final drying is carried out in a belt drier, the intermediate is granulated without back-mixing with the final product and applied to the belt drier. In the belt drier only a relatively small quantity of water remains to be evaporated. The area of application is the drying of sewage sludge to a dry matter content substantially over 65 %, in particular over 90 %.

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WO02093094A1; DE10058191A1; CN100371283C; US5611935A; EP0543133A1; EP0588152A1; EP0559012A1; EP0513706A1; EP0829457A3; US6638452B2; WO9606805A1; WO2009094868A1; WO9413592A1

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